

ABSTRACT OF THE DISCLOSURE

A membrane supported biofilm reactor uses modules having fine, hollow fibres, for example, made from dense wall Poly methylpentene (PMP) used in tows or formed into a fabric. In one module, one or more sheets of the fabric are potted into a module to enable oxygen containing gas
5 to be supplied to the lumens of the hollow fibres. Various reactors and processes, for example to treat wastewater, using such modules are described. Mechanical, chemical and biological methods are used to control the thickness of the biofilm.